

Abstract

The invention relates to thin-walled rolling bearings, such as needle bearings, which are produced without the removal of material and the outer rings of which form a structural unit and are produced from a cold-rolled strip.

According to the invention, the outer rings are produced from a cold-formable, fully hardenable steel, a ratio of from 1:20 to 1:5 being set between their wall thickness and the diameter of the bearing needles, and the fully hardened wall having a core hardness of ≥ 600 HV and a surface hardness of ≥ 680 HV.

The invention makes it possible for bearings to withstand higher static bearings than bearings made from conventional steels while taking up the same installation space.

Figure 1